

**SANYO: DP50749-02 & DP50719-00**  
**with PANASONIC 50" PLASMA PANEL (MD50H12NBC)**  
**SYMPTOM: TV's GREEN POWER LED WILL NOT REMAIN ON**

12/28/10

p#1

2009-9B

**note:** Unplugging any power cable from the SMPS to isolate the defective PCB will not work on this Panasonic panel.  
Unplugging any of the power cables will cause the SMPS to shut down.

**a) Unplug LVDS Cable (40 pin connector) from Main to Digital "D" Bd. (D5 connector) behind Main:**

*This will eliminate the Main Bd., and see if the SMPS will power ON automatically, and remain ON.*

Plug the AC Cord to power (do not push the Pwr Key on the TV) and see if the SMPS will power ON.

If the SMPS powers ON and remains ON, then the Main Bd. should be tried. If the SMPS continues to shutdown then resistance checks (#1-#12) below should be done.

*note: This panel has a self test mode, and unplugging the LVDS starts the self test. No raster is displayed, because a special jig is needed to activate the raster & video.*

**b) If the Base has ever been removed from the TV, the metal leg could have cut the Flat Ribbon and PCB underneath the leg. Please see page #4.**

**RESISTANCE CHECKS TO POSSIBLY ISOLATE DEFECTIVE PCB**

- 1) Is pin #1 or #2 (60V) of (P35 connector) shorted to chassis Gnd?  
yes, shorted = PDP Panel N/G  
not shorted = go to step #2
- 2) Is Pin #5 or #6 (5V) of (P25 connector) shorted to chassis Gnd?  
yes, shorted = go to step #3  
not shorted = go to step #4
- 3) Disconnect (p25 connector)  
Is Pin #5 or #6 (5V) of (P25 connector) shorted to chassis Gnd?  
yes, shorted = SMPS N/G  
not shorted = go to step #4
- 4) Disconnect (SC20 connector)  
Is pin #30 (5V) of SC20 connector shorted to chassis Gnd?  
yes, shorted = SC Bd N/G  
not shorted = go to step #5
- 5) Disconnect (SS23 connector)  
Is pin #1 (5V) of SS23 connector shorted to chassis Gnd?  
yes, shorted = SS Bd N/G  
not shorted = go to step #6

Location of connectors is  
on page #2

Please re-install all PCB mounting  
screws whenever a board is  
changed, and before re-testing  
the TV. The ground screws are  
needed to prevent damage to the  
PCB.

After working on TV, if it has  
several horizontal lines or bars,  
please try reseating the flat  
ribbons going to the SU & SD Bds.

Reconnect P25, SC20, & SS23 Connectors

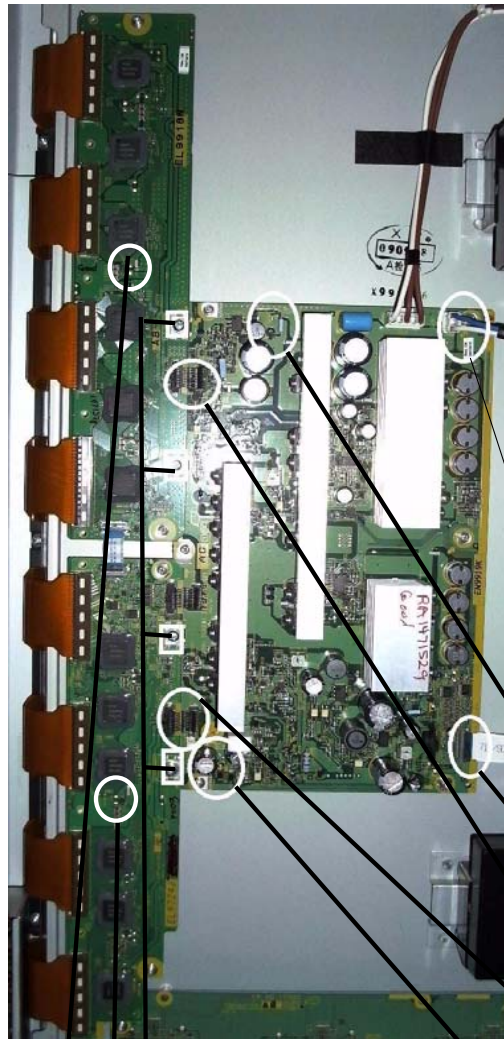
- 6) Disconnect (SC2 connector)  
Is TPVSUS (SC2, pin #1, 193V) on SC Bd. Shorted to chassis Gnd?  
yes, shorted = SC Bd. N/G  
not shorted = go to step #7
- 7) Reconnect SC2 and disconnect (SS11 connector)  
Is TPVSUS (SS11, pin #1, 193V) on SS Bd. Shorted to chassis Gnd?  
yes, shorted = SS Bd. N/G  
not shorted = Power ON TV, and check TPVSUS on SC Bd. for 193V before shutdown  
If no output, = SMPS N/G  
If 193V OK is before shutdown, SC Bd. may be defective (can not be sure)

Reconnect SS11 Connector

- 8) Is TPSC1 (143V) shorted to base pattern of SU/SD Bd?  
Base Pattern Test Points are on attached page (please do not use chassis Gnd)  
yes, shorted = go to step #9  
not shorted = go to step #11, not necessary to check #9 - #10
- 9) Disconnect SU41 connector  
Is TPSC1 shorted to base pattern of SU/SD Bd?  
not shorted = SU Bd. may be defective  
yes, shorted = go to step #10
- 10) Reconnect SU41 and disconnect SD42 connector  
Is TPSC1 shorted to base pattern of SU/SD Bd?  
not shorted = SD Bd. may be defective  
yes, shorted = SC Bd. may be defective
- 11) Measure resistance across C956 (143V across cap.) on SD Bd.. If resistance is only a few ohms, the SD Bd. is defective.
- 12) Measure resistance across C907 (143V across cap.) on SU Bd.. If resistance is only a few ohms, the SU Bd. is defective.

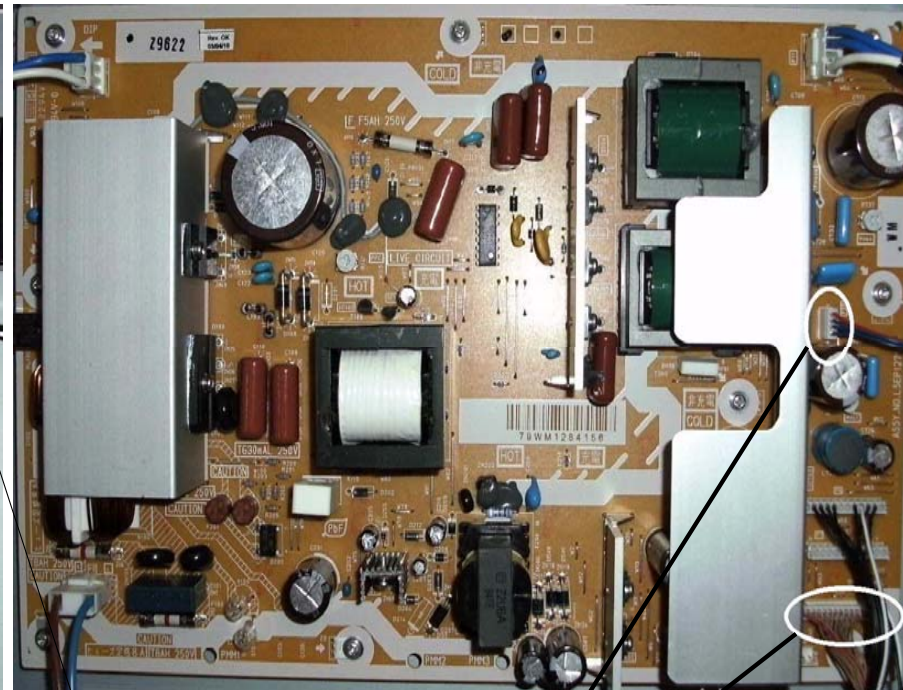
If you can not find anything wrong and you suspect the panel is shorted, you can unplug the eight flat ribbons from the panel to the buffer bds. (SU & SD) and see if the SMPS will remain ON. You can not unplug the flat ribbons to the Sustain Drive (SS) Bd. (if you unplug the flat ribbon/s to the SS Bd. the panel will shut down). If all PCBs and other connections are OK, the SMPS will power ON and have all voltages with these ribbons unplugged. If the SMPS should remain ON with the ribbons unplugged, you should re-connect them and then verify that the SMPS still shuts down when they are connected.  
*note: The SMPS will remain ON, if one or more of the flat ribbons are unplugged from the panel to the buffer bds. (SU & SD), if the PCBs and other connections are OK.*

SC Bd.



C907  
C956

SMPS



SC2

P35

P25

SS Bd.



SS11

TPVSUS (SS Bd.)

SS23

TPVSUS (SC Bd.)

SC20, pin #30

SU41

SD42

TPSC1

**BASE PATTERN TEST POINTS:**

4 screws total: 2 screws through SU & SC Bds.,  
and 2 screws through SD & SC Bds.  
(these screws are not chassis ground)

← VERY IMPORTANT

p#2

DP50749-02

DP50719-00

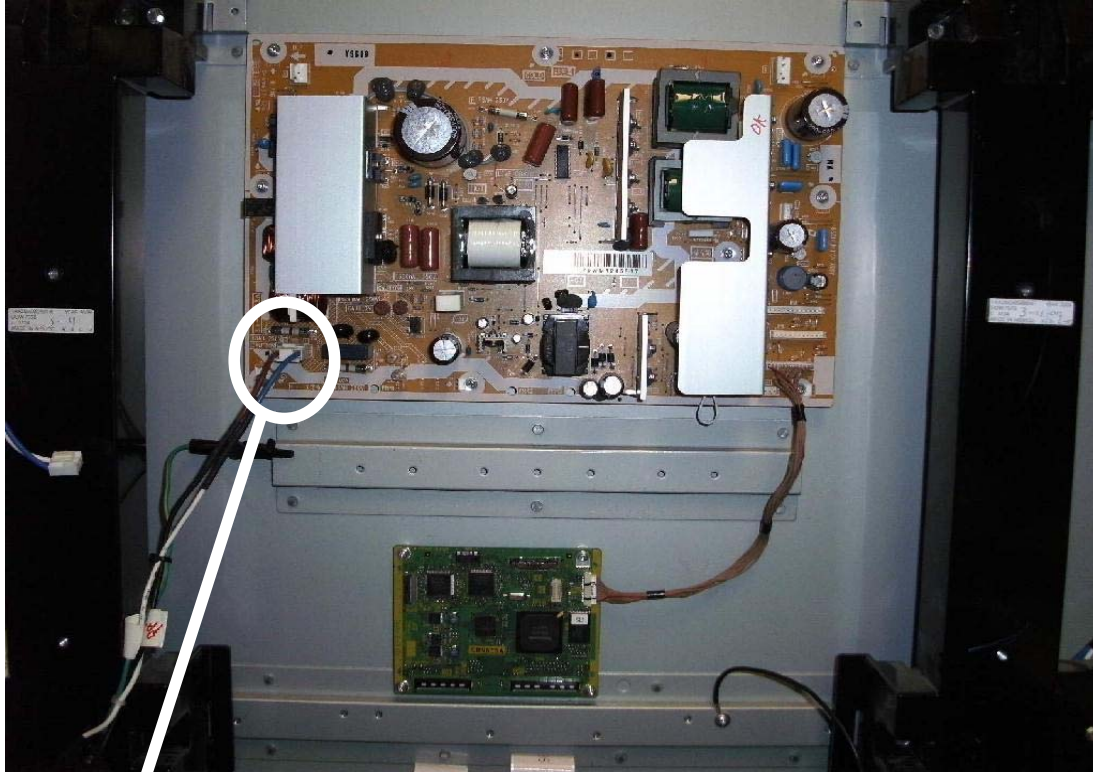
12/16/10

# IF YOU BELIEVE THE SMPS IS DEFECTIVE

The SMPS can be checked, but all cables & flat ribbons from the SMPS & Digital Processor PCB must be unplugged. The only exception is the cable from D25 (D Bd.) to P25 (SMPS) must be connected. With everything disconnected except this one cable, and when power is applied to the SMPS, the SMPS should turn ON.

If the SMPS is working OK, please reconnect all connectors to the SMPS & Digital Processor. If one of the other PCBs is defective, it is possible to damage the SMPS, w/o the flat ribbons connected to the Digital Processor.

## SMPS & Digital Processor



Apply power to the SMPS.

↑ No cables attached to SMPS or Digital Bd., except cable from D25 to P25.

These voltages should be present:

Connector:

P2	p1	193.6
	p2	

P6	p1	
	p2	15.5
	p3	15.5
	p4	
	p5	
	p6	
	p7	
	p8	15.5
	p9	15.5
	p10	
	p11	
	p12	

P7	p1	
	p2	
	p3	
	p4	
	p5	5.0
	p6	
	p7	
	p8	
	p9	
	p10	
	p11	

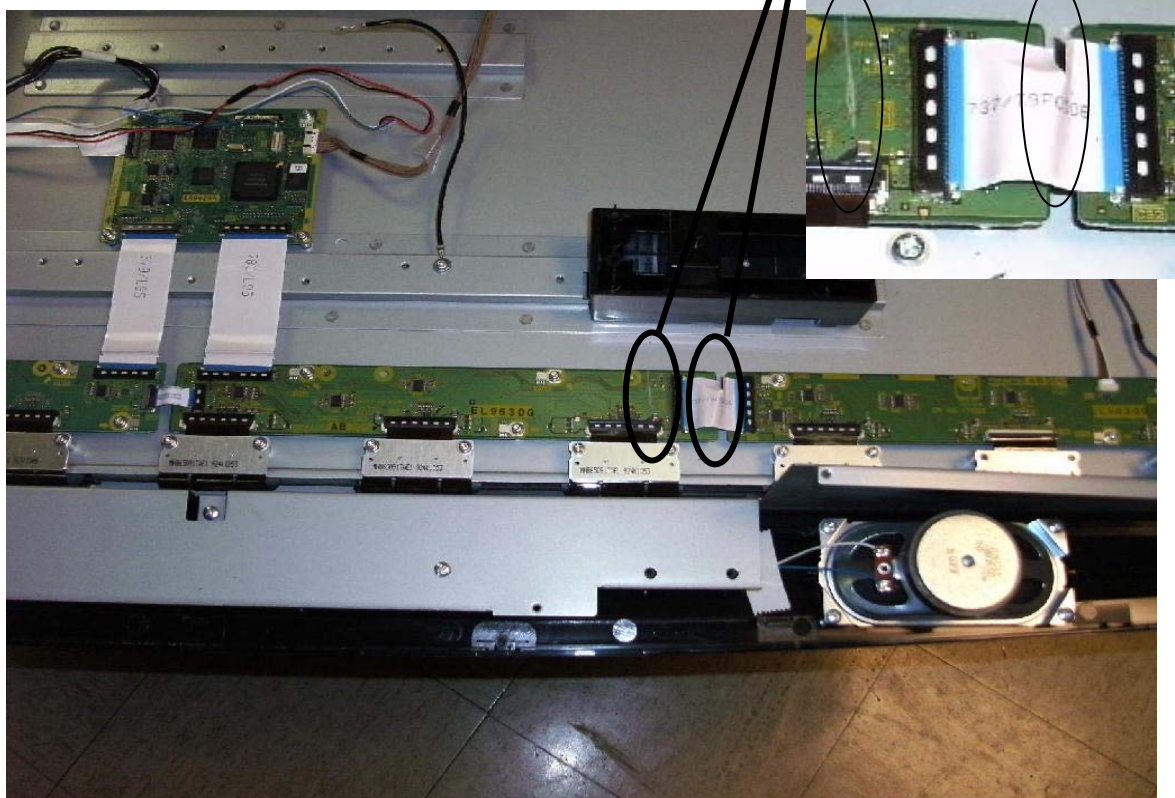
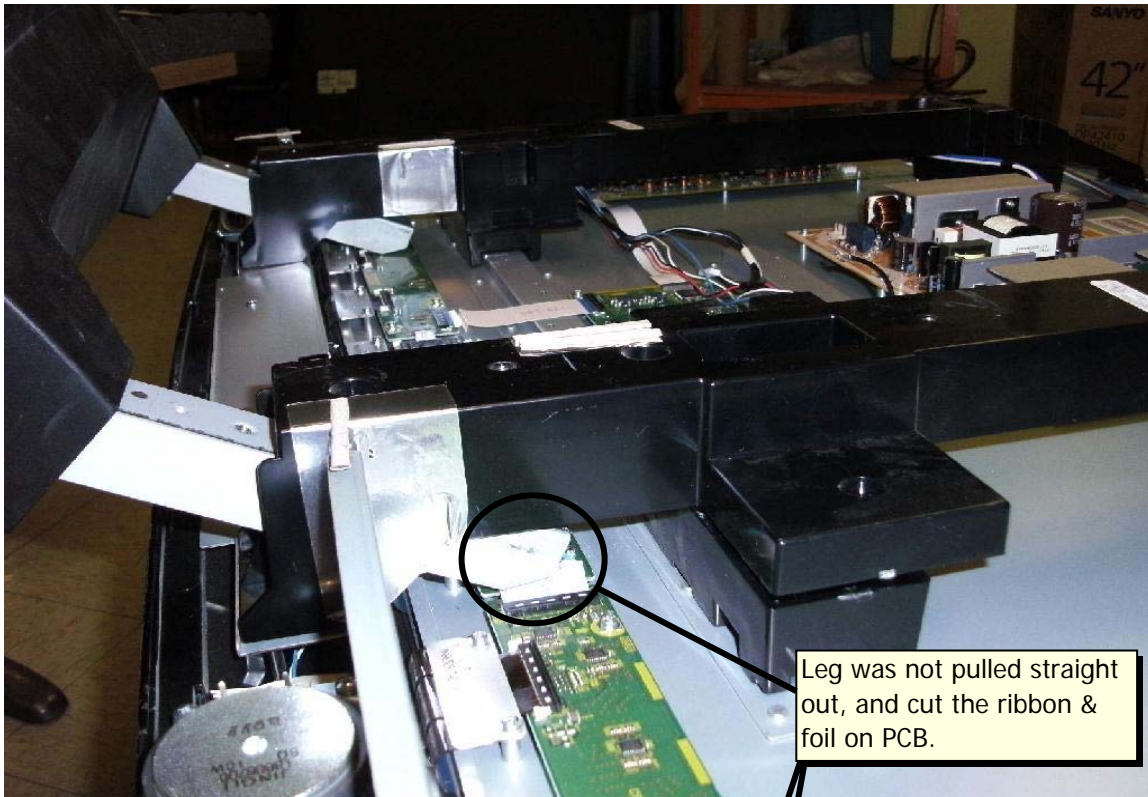
P11	p1	193.6
	p2	
	p3	
	p4	15.5

P25	p1	15.5
	p2	15.5
	p3	
	p4	
	p5	5.0
	p6	5.0
	p7	
	p8	
	p9	5.0
	p10	
	p11	3.3
	p12	
	p13	

P35	p1	60.3
	p2	60.3
	p3	
	p4	



If the Base is removed from the TV, the metal leg can damage the flat ribbon between the C2 & C3 PCBs, if it is not pulled straight out from the TV. It can also cut the foil on the C2 PCB. If the ribbon is cut, the part # is TSXL737.



# Notice



- ☐ CORRECTION
 ☒ PRODUCTION CHANGE  
☐ SERVICE FLASH
 ☐ ADD INFORMATION

FILE NO.

REVISION 0

Please add this notice to the Service Manual listed below.

Category: **COLOR TELEVISION** Date: **OCTOBER / 29 / 2009**  
 Model: **DP50719** Effective from : Chassis No. **P50719-00**  
 Destination: **U.S.A. / CANADA** REF : **No. SM780163-00**

**NOTE:** Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual. **If the Service Manual Chassis No. does not match the unit's**, additional Service Literature is required. This chassis is similar to Chassis No. P50749-00. Only the **difference** Service Information is given in this manual. For detailed Service Information, refer to the **Original** Service Manual and **Notices** for Chassis No. P50749-00 used in Model DP50749 (SM780163).

**SERVICING SHOULD BE PERFORMED BY ONLY TRAINED AND QUALIFIED SERVICE PERSONNEL.**

## 1. IN THE SERVICE ADJUSTMENTS

### PAGE 4 ON-SCREEN SERVICE MENU

Item No. **088 OP2 Data** should be changed from **3Ch** to **3Fh** in the table and in Note 2.

## 2. IN THE CHASSIS ELECTRICAL PARTS LIST MISCELLANEOUS

The reason for change.

- A : Misprint    B : Quality Reliability    C : Standardization  
 D : Design    E : Add as a possible sub    F : Schematic location change  
 G : Purchasing Request

Page & Section	Schematic Location		Part No.	Description	Q'ty	Interchangeability	Reason
Page 11, Chassis Electrical Parts List	C1646	Old	N/A	NOT USED	0	NO	D
		New	CK1H333KLZBNG	CERAMIC 0.033U K 50V	1	NO	
	C1649	Old	N/A	NOT USED	0	NO	D
		New	CK1H682KLZBNG	CERAMIC 6800P K 50V	1	NO	
	C1652	Old	N/A	NOT USED	0	NO	D
		New	CEXLB1C102VDN	ELECT 1000U M 16V	1	NO	
	C1654	Old	N/A	NOT USED	0	NO	D
		New	CK1E103KMNBNG	CERAMIC 0.01U K 25V	1	NO	

Page & Section	Schematic Location		Part No.	Description	Q'ty	Interchangeability	Reason
Page 11 Chassis Electrical Parts List	C1655	Old	N/A	NOT USED	0	NO	D
		New	CK1E103KMNBNG	CERAMIC 0.01U K 25V	1	NO	
	C1656	Old	N/A	NOT USED	0	NO	D
		New	CC1H391JLZCNG	CERAMIC 390P J 50V	1	NO	
	C1658	Old	N/A	NOT USED	0	NO	D
		New	CK1H104KLZBNG	CERAMIC 0.1U K 50V	1	NO	
	C1659	Old	N/A	NOT USED	0	NO	D
		New	CK1E105KGMBNG	CERAMIC 1U K 25V	1	NO	
	C1662	Old	N/A	NOT USED	0	NO	D
		New	CEXLB1C102VDN	ELECT 1000U M 16V	1	NO	
	C1665	Old	N/A	NOT USED	0	NO	D
		New	CK1E105KGMBNG	CERAMIC 1U K 25V	1	NO	
	C1666	Old	N/A	NOT USED	0	NO	D
		New	CEXLB0J102VDN	ELECT 1000U M 6.3V	1	NO	
	C1667	Old	N/A	NOT USED	0	NO	D
		New	CK1E105KGMBNG	CERAMIC 1U K 25V	1	NO	
	C1668	Old	N/A	NOT USED	0	NO	D
		New	CC1H221JLZCNG	CERAMIC 220P J 50V	1	NO	
	C1669	Old	N/A	NOT USED	0	NO	D
		New	CK1H104ZLZFNG	CERAMIC 0.1U Z 50V	1	NO	
	C1679	Old	N/A	NOT USED	0	NO	D
		New	CC1H221JLZCNG	CERAMIC 220P J 50V	1	NO	
Page 14 Chassis Electrical Parts List	D1604	Old	N/A	NOT USED	0	NO	D
		New	DDSS3P3-E3--G	CERAMIC 390P J 50V	1	NO	
	D1605	Old	N/A	NOT USED	0	NO	D
		New	DDSS3P3-E3--G	CERAMIC 390P J 50V	1	NO	
Page 14 Chassis Electrical Parts List	IC1611	Old	N/A	NOT USED	0	NO	D
		New	QBD9845FV---P	CERAMIC 390P J 50V	1	NO	
	L1602	Old	1LB4L26B0740G	INDUCTOR, 220 OHM	1	NO	D
		New	N/A	NOT USED	0	NO	

Page & Section	Schematic Location		Part No.	Description	Q'ty	Interchangeability	Reason
Page 14, Chassis Electrical Parts List	L1604	Old	N/A	NOT USED	0	NO	D
		New	1LB4L26B0740G	INDUCTOR, 220 OHM	1	NO	
	L1608	Old	N/A	NOT USED	0	NO	D
		New	1LB4L26B0740G	INDUCTOR, 220 OHM	1	NO	
	L1610	Old	1LB4L26B0740G	INDUCTOR, 220 OHM	1	NO	D
		New	N/A	NOT USED	0	NO	
	L1633	Old	1LB4L26B0740G	INDUCTOR, 220 OHM	1	NO	D
		New	N/A	NOT USED	0	NO	
	L1634	Old	1LB4L26B0740G	INDUCTOR, 220 OHM	1	NO	D
		New	N/A	NOT USED	0	NO	
	L1635	Old	1LB4L26B0740G	INDUCTOR, 220 OHM	1	NO	D
		New	N/A	NOT USED	0	NO	
	L1636	Old	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
	L1637	Old	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
	L1638	Old	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
	L1644	Old	N/A	NOT USED	0	NO	D
		New	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	
	L1645	Old	N/A	NOT USED	0	NO	D
		New	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	
	L1646	Old	N/A	NOT USED	0	NO	D
		New	1AV4L26B5930N	INDUCTOR, 10U	1	NO	
Page 15, Chassis Electrical Parts List	L1686	Old	N/A	NOT USED	0	NO	D
		New	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	
	L5730	Old	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
	L5731	Old	N/A	NOT USED	0	NO	D
		New	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	

Page & Section	Schematic Location		Part No.	Description	Q'ty	Interchangeability	Reason
Page 15, Chassis Electrical Parts List	L6602	Old	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
	L6603	Old	N/A	NOT USED	0	NO	D
		New	RGFR000ZTAANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	
	Q1603	Old	T2SC3928A1R-P	TR 2SC3928A1S	1	NO	D
		New	N/A	NOT USED	0	NO	
	Q1641	Old	N/A	NOT USED	0	NO	D
		New	TAO4449-----P	TR AO4449	1	NO	
	Q1803	Old	T2SC3928A1R-P	TR AO4449	1	NO	D
		New	N/A	NOT USED	0	NO	
Page 16 Chassis Electrical Parts List	R017	Old	RGF4700JTCANL	MT-GLAZE 470 JA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
	R018	Old	N/A	NOT USED	0	NO	D
		New	RGF4700JTCANL	MT-GLAZE 470 JA 1/10W	1	NO	
Page 17 Chassis Electrical Parts List	R1615	Old	N/A	NOT USED	0	NO	D
		New	RGF7501JTCANL	MT-GLAZE 7.5K JA 1/10W	1	NO	
	R1616	Old	N/A	NOT USED	0	NO	D
		New	RGF1001JTCANL	MT-GLAZE 1K JA 1/10W	1	NO	
	R1617	Old	N/A	NOT USED	0	NO	D
		New	RGF1001JTCANL	MT-GLAZE 1K JA 1/10W	1	NO	
	R1618	Old	N/A	NOT USED	0	NO	D
		New	RGF6801FTCANL	MT-GLAZE 6.8K FA 1/10W	1	NO	
	R1640	Old	RWXLB71R2KXAL	WIRE WOUND 1.2 KA 7W	1	NO	D
		New	N/A	NOT USED	0	NO	
Page 18 Chassis Electrical Parts List	R1668	Old	N/A	NOT USED	0	NO	D
		New	RGF2202FTCANL	MT-GLAZE 22K FA 1/10W	1	NO	
	R1669	Old	N/A	NOT USED	0	NO	D
		New	RGF1002FTCANL	MT-GLAZE 10K FA 1/10W	1	NO	
	R1675	Old	N/A	NOT USED	0	NO	D
		New	RGF1002FTCANL	MT-GLAZE 10K FA 1/10W	1	NO	



Page & Section	Schematic Location		Part No.	Description	Q'ty	Interchangeability	Reason
Page 18 Chassis Electrical Parts List	R1676	Old	N/A	NOT USED	0	NO	D
		New	RGF1002FTCANL	MT-GLAZE 10K FA 1/10W	1	NO	
	R1680	Old	N/A	NOT USED	0	NO	D
		New	RN1R005JTfANL	MT-FILM 0.005 JA 1W	1	NO	
	R1681	Old	N/A	NOT USED	0	NO	D
		New	RGF18R0JTCANL	MT-GLAZE 18 JA 1/10W	1	NO	
	R1682	Old	N/A	NOT USED	0	NO	D
		New	RGF2202JTCANL	MT-GLAZE 22K JA 1/10W	1	NO	
	R1812	Old	N/A	NOT USED	0	NO	D
		New	RGF4701JTCANL	MT-GLAZE 4.7K JA 1/10W	1	NO	
	R1813	Old	RGF1002JTCANL	MT-GLAZE 10K JA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
Page 20 Chassis Electrical Parts List	R6300	Old	N/A	NOT USED	0	NO	D
		New	RGF1000JTCANL	MT-GLAZE 100 JA 1/10W	1	NO	
	R6319	Old	N/A	NOT USED	0	NO	D
		New	RGF1000JTCANL	MT-GLAZE 100 JA 1/10W	1	NO	
	R6347	Old	RGFR000ZTCANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
	R6349	Old	N/A	NOT USED	0	NO	D
		New	RGFR000ZTCANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	
Page 16 Chassis Electrical Parts List	R822	Old	N/A	NOT USED	0	NO	D
		New	RGF4701JTCANL	MT-GLAZE 4.7K JA 1/10W	1	NO	
	R840	Old	RGFR000ZTCANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	

Page & Section	Schematic Location		Part No.	Description	Q'ty	Interchangeability	Reason
Page 16, Chassis Electrical Parts List	R841	Old	RGFR000ZTCANL	MT-GLAZE 0.000 ZA 1/10W	1	NO	D
		New	N/A	NOT USED	0	NO	
	R842	Old	N/A	NOT USED	0	NO	D
		New	RGF4701JTCANL	MT-GLAZE 4.7K JA 1/10W	1	NO	
	R843	Old	N/A	NOT USED	0	NO	D
		New	RGF4701JTCANL	MT-GLAZE 4.7K JA 1/10W	1	NO	
Page 21, Chassis Electrical Parts List	▲ WK5LV -PN	Old	1AA4W30B56400	CORD 50INCH,40P-31P(LVDS)	1	NO	D
		New	1AA4W30B61901	CORD 50INCH,40P-31P(LVDS)	1	NO	
	▲ EL901	Old	1AV4T44B02600	PDP MODULE	1	NO	D
		New	1AV4T44B02800	PDP MODULE	1	NO	

For parts or service contact:  
**Sanyo Manufacturing Corporation**  
**P.O. Box 2000**  
**3333 Sanyo Road**  
**Forrest City, Arkansas 72335-2000**